

Title (en)

Optical device for rotating the polarization of linearly polarized light

Title (de)

Optisches Gerät zu Drehung der Polarisation linear polarisierten Lichts

Title (fr)

Dispositif optique pour la rotation de la polarisation de la lumière linéairement polarisée

Publication

EP 1255133 B1 20040317 (EN)

Application

EP 02009174 A 20020424

Priority

GB 0110492 A 20010428

Abstract (en)

[origin: EP1255133A1] An optical device (29) for rotating the polarisation of a linearly polarised, broadband input beam of light (3) comprises prism means (30, 37, 43). The input beam is incident normal to a first face (31) and exits normal to a second face (47) of the prism means. The prism means comprises a light transmitting material having a plurality of totally internally reflecting surfaces (32,33,34) and one or more interfaces, the totally internally reflecting surfaces are arranged such that the polarisation of the exit beam is rotated by 90 DEG relative to the input beam, each interface comprises a pair of parallel surfaces (35, 39) separated by a gap (36), the parallel surfaces are arranged substantially to satisfy the Brewster condition such that surface reflection losses are minimised and the input and exit beams are substantially collinear. <IMAGE>

IPC 1-7

G02B 5/04; **G02B 5/30**; **G02B 27/28**

IPC 8 full level

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CPC (source: EP US)

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